IN THE CLAIMS

43. (Previously Presented) A video decoding method comprising:

storing a decoded image of a reference frame; and

synthesizing a predicted image of a present frame by using said decoded image and the information related to said present frame,

wherein said predicted image synthesizing comprises:

calculating motion vectors of 3 representative points having coordinates (i,j), (i+p,j), and (i,j+p) using motion vectors of corner points of said predicted image having coordinates (0,0), (r,0), and (0,s), where r, s, i, and j are integers, p and q are integer powers of 2, p is greater than or equal to r, p/2 is less than r, q is greater than or equal to s, q/2 is less than s, and the sampling intervals of pixels are 1 in both horizontal and vertical directions;

calculating the motion vector of each pixel in said predicted image from said motion vectors of said representative points; and

synthesizing said predicted image from said motion vector of each pixel and said decoded image.

44. (Previously Presented) A video decoding method according to claim 43,

wherein said calculating motion vectors of 3 representative points and said calculating the motion vector of each pixel performs liner interpolation or extrapolation.

45. (Currently Amended) A video decoding method comprising:

storing a decoded image of a reference frame; and

synthesizing a predicted image of a present frame by using said decoded image and the information related to said present frame,

wherein said predicted image synthesizing comprises:

calculating motion vectors of 3 representative points having coordinates (i,j), (i+p,j), and (i,j+p) using motion vectors of corner points of said predicted image having coordinates (0,0), (r,0), and (0,s), where r, s, i, and j are integers, p and q are integer powers of 2, p is greater than

or equal to r, p/2 is less than r, q is greater than or equal to s, q/2 is less than s, and the sampling intervals of pixels are 1 in both horizontal and vertical directions;

calculating the motion vector of each pixel in said predicted image from said motion vectors of said representative points; and

synthesizing said predicted image from said motion vector of each pixel and said decoded image, wherein:

the horizontal and vertical components of said motion vectors of said corner points are integer multiples of 1/n;

the horizontal and vertical components of said motion vector of each pixel in said predicted image are integer multiples of 1/m;

the horizontal and vertical components of said motion vectors of said representative points are integer multiples of 1/k;

in said ~~means for~~ calculating motion vectors of 3 representative points, said motion vectors of 3 representative points are calculated using equations:

$$u'(x,y)=((u00rs+(u01-u00))xs+(u02-u00)yr)k)//(rsn),$$

v'(x,y)=((v00rs+(v01-v00))xs+(v02-v00)yr)k)//(rsn),

u0=u'(i,j), v0=v'(i,j), u1=u'(i+p,j), v1=v'(i+p,j),

u2=u'(i,j+q), and v2=v'(i,j+q); and

in said ~~means for~~ calculating the motion vector of each pixel in said predicted image, a motion vector of a pixel in said predicted image is calculated using equations:

u(x,y)=((u0pq+(u1-u0))xq+(u2-u0)yp)m)//(pqk), and

v(x,y)-((v0pq+(v1-v0))xq+(v2-v0)yp)m)//(pqk),

where (u00,v00), (u01,v01), and (u02,v02) are n times said motion vectors of said corner points having coordinates (0,0), (r,0), and (0,s), (u(x,y), v(x,y)) is m times the horizontal and vertical components of the motion vector of a pixel having coordinates (x,y) in said predicted image, (u0,v0), (u1,v1), and (u2,v2) are k times said motion vectors of said representative points having coordinates (i,j), (i+p,j), and (i,j+p), u00, v00, u01, v01, u02, v02, u(x,y), v(x,y), u0, v0, u1, v1, u2, and v2 are integers, k, m, and n are integer powers of 2, and "///" and "//" represent integer divisions that round the quotient of ordinary division into an adjacent integer when said quotient of said ordinary

division is not an integer, and their priority as an operator is the same as that of ordinary multiplication and division.

46. (Previously Presented) A video decoding method according to claim 45,

wherein said "///" and "//" round the quotient of ordinary division, when the result of said quotient of ordinary division is the sum of ½ and an integer, either into the nearest integer:

(1) away from 0; (2) toward 0; (3) away from 0 when the dividend is negative and toward 0 when the dividend is positive; or (4) away from 0 when the dividend is positive and toward 0 when the dividend is negative.